

SECRET

To Present A Review of the Current Status of the

Air Force
B-2 Program

USAF Declassification/Release Instructions On File

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GENERAL INFORMATION

U-2 Single Place, Single Engine Jet Aircraft for long
range reconnaissance at extreme altitude - Built by
Lockheed Aircraft Corporation

Using Command - - SAC

Prime Support AMA - - WRAMA

Engine - - - - - J-57-P-37/P31A

Fuel (Special) LF1A 1055 U.S. Gal
1360 U.S. Gal

Design Gross Wt. - - - - -17,750 lbs

Wing Span - - - - - 80 feet

Length - - - - - 49.9 feet

Landing gear - - - - - Bicycle Type, Wing Pogo Sticks

Auto Pilot

No Ejection Seat

Combat Equipment - Varied Photo and Electronics Packages

(B)

BASIC MISSION PROFILE

Descent

25X1D0e

25X1D0e

25X1D0e

200 N.M.

1500 N.M.

T.O. Wt - - - - - 17,750 lbs
Engine - - - - - F-37
Increased Performance - - - - - F-37

Cruise Out/Back Military Power - - - - 425 Kts
Mission Time - - - - - 8 Hrs
Dist. T.O. and Climb 50' - - - - - 1100 ft
Dist. Land From 50' - - - - - 1900 ft

OK

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PROGRAM DATA

	SCHEDULE (29 A/O)														
	1956					1957									
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Photo	1	-	1	1	2	2		2	2	1	2			1	
Research						1	1			1	1				1
Ferret							1			1	1			2	
H.R. Radar							1	1		1					
Sampler							1	1				2	3		

CONTRACTUAL STATUS

(AIRFRAME)

Letter Contract Awarded 30 Jan 56

Tentative Price -----\$22,423,355

Definitive Contract Negotiated 11 July 56

Target ----- \$18,640,114

AIR FRAME

Air Frame (Unit - \$457,154) 29 a/o-----\$13,257,466
 Sampling Mod (Unit - \$83,713) 6 a/o-----502,277
 Spare Parts-----4,535,446
 G.H.E.-----344,925

Total (Includes Profit 9 1/2%)-----\$18,640,114

SERVICES CONTRACT (TECH REPS, TRAINING, &
 WAREHOUSE PEOPLE 78,000

EQUIPMENT

Sextant Contract-----\$ 464,212
 View Finder, Tracker, Camera windows-----1,430,628
 Cameras-----1,221,523
 * Systems I, III, & Ground Support Equip-----1,526,423
 AFQ-56 Radar-----748,621
 Photo Processing Equip-----1,220,449
 Personal Equip-----345,126

Total (Includes spares, test equip, data
 training, tech reps, factory overhaul
 parts) \$ 7,589,059
 6,956,982

DOES NOT INCLUDE ENGINE PROGRAM.

TOTAL FUNDS PRESENTLY REQUIRED FOR PROGRAM (Less GFAR)

Airframe & Services-----18,718,114
 Equipment-----18,640,114
 7,589,059
 6,956,982
 \$26,229,173

Above prices are for follow-on Program and do not include development
 costs picked up on initial procurement.

* PRICE OF SYSTEM IV WILL BE NEGOTIATED AFTER
 DEVELOPMENT IS COMPLETE.

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EQUIPMENT CHART

<u>ITEM</u>	<u>PHOTO</u>	<u>RESEARCH</u>	<u>FERRIS</u>	<u>H.R.R.</u>	<u>SAMPLER</u>
Driftsight	X	X	X	X	X
Sextant	X		X	X	X
Tracker Camera	X		X	X	X
A1 Camera	X				
A2 Camera	X				
B Camera	X				
C Camera	X				
APQ - 56				X	
Radar			X	X	
System I	X		X	X	
System III A	X		X	X	
System IV			X		

STATUS OF EQUIPMENT

DRIFTSIGHT - Operational, On Firm Contract

Delivery ^{100% TT} Begins Oct 56

SUPPLIED TO DEC

SEXTANT - Operational, On Firm Contract

Delivery ^{100% TT} Begins Oct 56

TRACKER CAMERA - Operational, On Firm Contract

Delivery ~~begins Jan 57~~

SUPPLIED TO JAN 57.

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A1 and A2 CAMERAS - Operational on Firm Contract
Delivery begins ^{AN} Dec 56

B CAMERA - Undergoing additional testing Operational only on
Risk Basis (40 to 60% effective) on firm contract
Delivery begins Feb 57

C CAMERA - Under development ^{FLIGHT DEC 57}
1st test ~~due~~ test Oct ~~56~~
UNDERGOING ADDITIONAL TESTING.

AFQ - 56 and RADAN presently undergoing testing. Units on contract
delivery 1st Mar 57

RADAN for FERRET a/c - ~~Authentication to receive test equipment~~
Attempting to install prior to a/c delivery.
TIED IN WITH ASN-6 GPI. ASN-7 TO BE
INSTALLED WHEN AVAILABLE

SYSTEMS I and III - Operational, Contractor Manufacturing under
Letter of Intent. ~~Plan for delivery Oct 56~~
System I now being delivered. System III
delivery begins ^{Firm} ~~Nov~~ 56.
^{AN DEC}

SYSTEM IV - Still under development
1st delivery for test approximately ^{1 AN} Mar 56.

FERRET

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STATUS OF PRIME SUPPORT ITEMS

PHOTO PROCESSING EQUIPMENT - Units for 3 complete processing sites
(9 $\frac{1}{2}$ and 70 mm) plus 2 additional 70mm sites are on firm contract.
Available approximately March 57
Contract-let for modification and check out of ¹² Govt furnished A9

PROCESSING EQUIP FOR SYSTEMS I AND III - 3 complete sets being procured
~~Contract negotiations, etc.~~ Tape Reproduction at site, Analysis
at Offutt.

FUEL - Tests being conducted on special grade JP-1 MFG in accordance
with WADC Spec. If successful, this fuel will be alternate to
JP-1A. ~~Test results indicate~~ ^{undecided whether to} continue using JP-1A
or switch to JP-1. (Large quantities
required)

ENGINES - Joint Support

30 R-37 }
20 RP-31A } 49 total
30 R-31A }

ATTENTION
45 remain
96 engines remain

CONTRACTOR OVERHAUL BEING UTILIZED

SPARE PARTS TO BE APPORTIONED

AME & SAC ^{officially} requested add'l engines
procurement re NORSL.

(X)
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MAINTENANCE

Normal SAC (Centralized Type)

Maintenance to be Utilised

**Common Items - - To be repaired and replaced through normal
Air Force system - Prime Depots**

**Peculiar Items - - Contractor Overhaul - Tech Rep Assistance in
Field**

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SUPPLY AND SUPPORT

1. Depot set up at Maywood - Secure Warehouse

5 WRAMA people detached service
Utilizing cleared contractor personnel
Bins set up
Stocks being received
Established stock records

- ~~2. OPERATING & SUPPLY DIRECTIVES~~ ~~PUBLISHED~~ ~~BY~~ ~~AMC~~ ~~USING~~ ~~DRAGONFLY~~ ~~PRIORITY~~ ~~14 F~~
2. Wing SIOE Published by AMC - BEING SCREENED BY SAC FOR
PURCHASING EQUIPMENT. REQUISITIONS TO BE ISSUED FOR
REMAINING EQUIPMENT. USING DRAGONFLY PRIORITY 14 F
3. AFSD action taken on common items of Squadron SIOE and Depot
support items. Equipment coming into Maywood

4. Flyaway kit listing published

SAC and WRAMA to build Flyaway Kite

5. Provisioning - (Based upon 30 day FAX and 360 day stock level)

Initial provisioning completed with all contractors. ~~except~~

~~Base warehouse scheduling for 5 Oct.~~

WRAMA DEPT A 31 OCT
PROV M-G.

6. Overhaul support review meeting ~~to be held in near future.~~ ~~11 NOV 59~~
HELD ON 26-27 OCT.

7. ~~System set up to support first~~ ~~aircraft.~~ ~~FOR TRANSITION.~~
~~FLYING 2 MINIMUM FLIGHT TRAINING WITH EQUIPMENT~~
NOW NOW IN

8. Objective to have complete support by deployment date 1 July 1959.

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TRAINING

1. Training of SAC personnel ~~being~~ contractually covered with each contractor.
 - A. Air Frame - ^{2nd} 1st class 12 students ^{each} Completed training, 91 total at Lockheed Aircraft Corp
 - B. Cameras - SAC and Nyeon have made firm arrangements - 7 people ^{to train} 1ST CLASS NOW IN PROGRESS
 - C. Driftsight and Tracker - ~~SAC and~~ Perkins and Elmer. ^{and} ~~Make firm arrangements~~ 1ST CLASS NOW IN PROGRESS
 - D. Systems I and II ^{1st} Class to start ^{IN PROGRESS} 15 Oct (18 students - 10 weeks)
 - E. Sextants - 1st class ^{COMPLETED TRAINING AT BAIRDO} to start 15 Oct.
 - F. Pressure Suits - Arrangements made to train 3 people ^{AT BAIRDO} TRAINED AT [REDACTED] 25X1A5a2
 - G. Autopilot - Technicians will receive OJT at site on auto pilot difference
 - H. engine - ³⁷ ~~Person~~ using ~~trained~~ engine mechanics - Receive add'l OJT
2. Pilot training and checkout ^{being} ~~is~~ conducted at site.
~~Have a check site~~

SUMMARY

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FAST MOVING PROGRAM
APPEARS THAT AIRCRAFT WILL BE AVAILABLE AND OPERATIONAL
ON SCHEDULE
FULL SUPPORT SHOULD BE AVAILABLE (ENJOY HIGH PRIORITY)
BASIC GUIDELINE SP 1914 SECOND PREFERENCE TO SP 1913

ASSOCIATED RECOMMENDATION

That over-all program procedures be evaluated in near future for purpose of adapting or utilizing favorable procedures on other Air Force procurements.

Assign responsibility to contractor-let him proceed without hindrance.

Program monitored by small Air Force complement with full responsibility and authority.

CAMERA CONFIGURATION CHARACTERISTICS

CONFIGURATION	A1		A2	B		C			TRACKER
				M1	M2	M1	M2	M3	
Mission Purpose	Mapping and Medium Scale Mil Industrial Intell		Medium Scale Mil Indust Intell	Medium Scale Military Indust Intell		Spotting Camera Mil Indust Intell			a/c course Identif and Intell
Uses of Information	Maps for Location and Identif of Ind Install		Identif of Indust Install	Ident and Anal of Install for Technical and econ info		Detail Analysis of Install			Analysis of terrain and Install
No of Cameras and focal length	3-6"	1-24"	3-24"	1-36"		1-180"			_____
Range Photo Flightline Miles	3000 Stereo	1080 Stereo	3,250 Stereo	1,700 or 2,800 Stereo		500 Stereo spot photos 3300 singleline 1750 double line			4500 miles
Area coverage vertical photo	20x20 miles	5x10 miles	5x10 miles	6.5 x 6.5 miles		1x1 mile			
Size of Print	9"x9" 9"x24"		9"x18"	18"x18"					2 3/8"x 9 1/2"
Ground Scale Vertical Photo	<div></div>							25X1D0e	
Ground Resolution Vertical Photo	<div></div>							25X1D0e	
Weight with Film	339 lbs		336 lbs	430 lbs					55 lbs

+2
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PROBLEM AREAS

GENERAL PROBLEMS

1. SECURITY
2. LACK OF OPERATIONAL CONCEPT
3. LACK OF OPERATING BASE
- ~~4. DEFECT IN INITIAL OPERATION. LACK OF AIRCRAFT~~
5. NORMAL TENDENCY TO CHANGE AIRCRAFT AND/OR ADD EQUIPMENT
6. USE OF SPECIALLY DEVELOPED EQUIPMENT IN OTHER AIRCRAFT

~~GENERAL PROBLEMS~~

- ~~1. DEFICIENCY OF RADAR IN INITIAL AIRCRAFT~~

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